



United States Department of Agriculture

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Administration

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Reference # 264

October 30, 2015

TO: FGIS POLICY BULLETIN BOARD

FROM: Anthony Goodeman, Acting Director */s/ Anthony Goodeman*  
Field Management Division

SUBJECT: Certification of Falling Number Based On Composite Samples

ORIGINATING OFFICE: Policies, Procedures, and Market Analysis Branch

**1. PURPOSE**

This memorandum defines when falling number may be certified based on composite samples of wheat.

**2. BACKGROUND**

Per Policy Bulletin Board Memo #238, Unit Train Inspection Options, and Directive 9180.59, Composite Sample Analysis for Combined Land Carrier Inspections, shipments of wheat by land carrier may be certified in 4 different ways, listed below. These options are available for both export and domestic shipments.

- a. Each carrier (railcar, truck, or container) may receive a separate certificate.
- b. Groups of up to 5 railcars, 15 trucks, or 20 containers may receive a single certificate based on the averages of the individual results for each carrier.
- c. Groups of up to 5 railcars, 15 trucks, or 20 containers may receive a single certificate based on one composite sample.
- d. An entire unit train may receive a single certificate based on the CuSum plan, where a subplot may consist of up to 5 cars for trains of less than 50 cars or up to 10 cars for trains of 50 cars or more.

Falling number is a quality factor for wheat flour and falls under the Agricultural Marketing Act of 1946 (AMA), but it may be reported on a United States Grain Standards Act (USGSA) certificate for wheat if it is measured in conjunction with testing services performed under the USGSA. It is not a grade determining factor for wheat. Directive 9180.38, which specifies how falling number is determined and reported, states that a subplot sample or a composite sample representing an entire lot may be used for falling number determination for export shipments. This has led to uncertainty about whether domestic shipments or shipments not certified under the CuSum plan may use composite samples.

### **3. POLICY**

The options given in Directive 9180.38 for export shipments are also available for domestic shipments. Composite sample analysis is also allowed for shipments not graded under the CuSum plan, as follows:

If a lot of up to 5 railcars, 15 trucks, or 20 containers is receiving a single certificate, the same group of carriers may also have falling number determined from a composite sample, or from a combination of the individual carrier results, and reported on the same certificate. Carriers may not be grouped differently for falling number than for other factors. Please note that falling numbers (FN) must not be averaged arithmetically. They must be converted to liquefaction numbers (LN) using the formula in Directive 9180.38, then the liquefaction numbers can be averaged and the average converted back to a falling number:

$$\begin{aligned} \text{LN} &= 6000 / (\text{FN} - 50) \\ \text{Average FN} &= (6000 / \text{Average LN}) + 50 \end{aligned}$$

When carriers are receiving individual certificates, separate certificates may be issued for falling numbers for groups of up to 5 railcars, 15 trucks, or 20 containers, and composite samples may be used for the falling number test. These separate certificates may be USGSA certificates which also report official criteria such as aflatoxin or protein, or they may be AMA certificates which report only falling number.

Directive 9180.38 allows an entire train to receive a falling number from a single composite sample, only if the entire unit train is graded as a lot under the CuSum plan.

This policy bulletin amends Directive 9180.38 to allow an entire train to receive a falling number from a single composite sample, regardless of whether or not the lot was graded under the CuSum plan.

**4. FILING INSTRUCTIONS**

File a copy of this notice with FGIS Directive 9180.38, Falling Number Determination for Wheat. Field office managers must make certain that a copy of this notice is provided to official agencies operating in their circuit.

**5. QUESTIONS**

Direct questions regarding this policy to Patrick McCluskey, Policies, Procedures, and Market Analysis Branch, at (816) 659-8403 or email at [Patrick.J.McCluskey@usda.gov](mailto:Patrick.J.McCluskey@usda.gov).